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10/627,417	07/25/2003	Tatsuya Shimoji	52478-2317	2333
21611 7590 02/06/2008 SNELL & WILMER LLP (OC) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			EXAMINER DUFFIELD, JEREMY S	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/627,417	SHIMOJI ET AL.	
	Examiner	Art Unit	
	JEREMY DUFFIELD	4178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 50-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 50-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Japan on 11 March 1997 and 30 August 1996. It is noted, however, that applicant has not filed certified copies of the 9-56687 and 8-230015 applications as required by 35 U.S.C. 119(b).

### ***Specification***

2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

4. Claim 62 is objected to because of the following informalities: Line 23, "extracting means." needs to be changed to --extracting means,-- because a claim must have only one period. Appropriate correction is required.

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### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 52 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 52 recites the limitation "the valid period" in Line 3.

There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 50-72 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 6, 7, 8, 10, 11, 12, 17, 18, 21, and 22 of Patent No. 6,757,911.

Application claim 50 and Patent claim 1 are both drawn to the same invention. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are different definitions or descriptions of the same subject matter varying in breadth. For example, note the following relationship between the instant application claims and the patented claims.

a) the preamble of application claim 50 is the same as the preamble of patented claim 1;

b) the claimed "content storing means...plurality of contents" (lines 2-8) of application claim 50 corresponds to the "content storing means...plurality of contents" (lines 2-8) of patented claim 1;

c) the claimed "multiplexing means...the same content" (lines 9-11) of application claim 50 corresponds to the "multiplexing means...the same content" (lines 18-22) of patented claim 1;

d) the claimed "broadcasting means...the broadcasting wave" (lines 12-13) of application claim 50 corresponds to the "broadcasting means...the broadcasting wave" (lines 29-31) of patented claim 1;

Therefore, it would have been obvious to one of ordinary skill in the art to readily recognize that the conflicting claims are different definitions or descriptions of the same

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subject matter varying in breadth. In this case, the application claims are broader and inclusive to the patented claims.

Allowance of Application claim 50 would result in an unjustified time-wise extension of the monopoly granted for the invention defined by Patent claim 1. Therefore, obviousness-type double patenting is appropriate.

Claim 51 corresponds to claim 1.

Claim 52 corresponds to claim 2.

Claim 53 corresponds to claim 8.

Claim 54 corresponds to claim 6.

Claim 55 corresponds to the combination of claim 21 and claim 22.

Claim 56 corresponds to claim 21.

Claim 57 corresponds to claim 22.

Claim 58 corresponds to claim 21.

Claim 59 corresponds to claim 22.

Claim 60 corresponds to the combination of claims 21 and 10.

Claim 61 corresponds to the combination of claims 21 and 11.

Claim 62 corresponds to claim 12.

Claim 63 corresponds to claim 12.

Claim 64 corresponds to the combination of claims 12 and 7.

Claim 69 corresponds to the combination of claims 12 and 10.

Claim 70 corresponds to the combination of claims 11 and 12.

Claim 71 corresponds to the combination of claims 1 and 12.

Claim 72 corresponds to claim 12.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 50, 51, 53, 55-62, and 69-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman (US 5,861,881).

Regarding claim 50, Freeman teaches a broadcasting apparatus, i.e. video server (Fig. 4, el. 70), comprising:

content storing means for storing a plurality of contents, i.e. programs (Col. 6, lines 1-25), each content including a set of presentation information, i.e. full-motion video (Col. 6, lines 1-25), and a set of control information corresponding to the set of presentation information, i.e. ACTV authoring commands (Col. 6, lines 1-25), the set of control information having a set of link information, i.e. function ID (Col. 13, lines 15-45), indicating the set of control information included in another linked content among the plurality of contents, wherein the set of link information included in the content indicates the set of presentation information and the set of control information included in another linked content among the plurality of contents, i.e. a video stream is played in



response to a user selection based on the function ID in the ACTV code (Col. 13, lines 15-61);

    multiplexing means for multiplexing the plurality of contents stored in the content storing means to generate a multiplexed stream, bringing the set of control information into correspondence with the set of presentation information included in the same content (Col. 7, lines 20-30; Col. 11, lines 19-23), and

    broadcasting means for embodying the multiplexed stream generated by the multiplexing means in a broadcasting wave and broadcasting the broadcasting wave, i.e. programs are sent over a network (Col. 6, lines 3-10).

    Regarding claim 51, Freeman teaches the set of control information has a setting of a valid period which expresses a period during which the set of control information is valid within an output period of the set of presentation information corresponding to the set of control information, i.e. trigger point occurs as the start of the control information and the end of the presentation is the end of the control information (Col. 13, lines 15-27), and

    wherein the multiplexing means multiplexes the set of presentation information and multiplexes the set of control information corresponding to the set of presentation information during the valid period of the set of control information to generate the multiplexed stream (Col. 7, lines 20-30; Col. 11, lines 19-23).

Regarding claim 53, Freeman teaches the multiplexing means multiplexes the set of control information, starting from a predetermined time before the set of control information becomes valid, the predetermined time being sufficiently long to enable a reception apparatus to process the set of control information, i.e. program is buffered until viewing can be switched to the selected audio/video stream (Col. 8, lines 11-65).

Regarding claim 55, claim is analyzed with respect to claim 50. Freeman also teaches the set of control information includes a set of additional information representing one of text and a graphic image that is to be outputted by way of being superimposed onto the corresponding set of presentation information, i.e. a graphical interrogatory message overlaid onto a video signal (Col. 13, lines 15-60).

Regarding claim 56, claim is analyzed with respect to claim 50. Freeman also teaches the set of control information includes a set of supplementary images representing menu items for the linked content indicated by the set of link information included in the set of control information, i.e. graphical messages arranged in a menu (Col. 13, lines 15-60; Col. 19, lines 25-33).

Regarding claim 57, Freeman further teaches the set of control information includes:

a plurality of sets of additional information representing one of text and a graphic image that is to be outputted by way of being superimposed onto the corresponding set of presentation information, i.e. a menu containing links to audio segments of each player in a sporting event (Col. 7, lines 6-13; Col. 13, lines 15-60; Col. 19, lines 19-32); and

a set of script information that validates one of the sets of additional information in a reception apparatus, in accordance with a user operation, i.e. user selects an answer to a message and the function ID triggers a macro (Col. 13, lines 15-67).

Regarding claim 58, Freeman further teaches the set of control information includes:

at least two groups made up of the set of link information and supplementary images, i.e. a menu containing links to audio segments of each player in a sporting event (Col. 7, lines 6-13; Col. 13, lines 15-60; Col. 19, lines 19-32);

a set of initial information showing which group of the set of link information and supplementary images is valid at a start of an output from a reception apparatus, the output being an output of the set of presentation information corresponding to the set of control information, i.e. interrogatory messages or the menu can be presented at the beginning of a program (Col. 13, lines 15-61); and

a set of script information that changes a valid group made up of the set of link information and supplementary images in the reception apparatus in accordance with a user operation, i.e. user selects an answer to a message and the function ID triggers a macro (Col. 13, lines 15-67).

Regarding claim 59, Freeman further teaches the set of control information further includes a set of additional information representing one of text and a graphic image that is to be outputted by way of being superimposed onto the corresponding set of presentation information, i.e. graphical interrogatory messages are overlaid onto the video signal (Col. 13, lines 15-61).

Regarding claim 60, Freeman further teaches the set of presentation information has either a set of image data, a set of sound data, or a combination of the set of image data and the set of sound data, i.e. video, audio, and/or graphics (Col. 13, lines 26-45).

Regarding claim 61, Freeman further teaches the set of image data is a set of video data or a set of still image data, i.e. video and/or graphics (Col. 13, lines 26-45).

Regarding claim 62, Freeman teaches a reception apparatus, i.e. client station (Fig. 4, el. 58, 62, 66), comprising:

receiving means for receiving a broadcasting wave including a multiplexed stream into which a plurality of contents have been multiplexed (Col. 7, lines 20-30; Col. 11, lines 19-23), each content including a set of presentation information, i.e. full-motion video, and a set of control information, i.e. ACTV authoring commands, corresponding to the set of presentation information, the set of control information having a set of link information, i.e. function ID, indicating the set of control information included in another linked content among the plurality of contents (Col. 6, lines 1-25; Col. 13, lines 15-61),

extracting means for extracting the set of presentation information and the set of control information corresponding to the set of presentation information included in a given content from the broadcasting wave received by the receiving means, i.e. video signal is decoded and interactive commands are extracted (Col. 5, lines 20-32; Col. 8, lines 1-20);

storing means for storing the set of control information extracted by the extracting means (Col. 5, lines 20-32);

outputting means for outputting the set of presentation information extracted by the extracting means, i.e. monitor (Fig. 4, el. 18; Col. 6, lines 25-30);  
and

signal receiving means for receiving a content switching signal, i.e. user selection (Fig. 6, el. 130; Col. 7, lines 60-65);

wherein the extracting means, in accordance with the content switching signal, extracts the set of control information indicated by the link information

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included in the set of control information stored in the storing means from the broadcasting wave as a new set of control information, and extracts the set of presentation information corresponding to the new set of control information from the broadcasting wave as a new set of presentation information (Col. 4, lines 48-67; Col. 5, lines 20-32; Col. 8, lines 1-25),

wherein the storing means stores the new set of control information extracted by the extracting means (Col. 5, lines 20-32), and

wherein the outputting means outputs the new set of presentation information extracted by the extracting means (Fig. 4, el. 18; Col. 6, lines 25-30; Col. 8, lines 1-33),

wherein the set of link information included in the content indicates the set of presentation information and the set of control information included in another content among the plurality of contents (Col. 13, lines 15-45),

wherein the extracting means, in accordance with the content switching signal, extracts the set of presentation information indicated by the link information included in the set of control information stored in the storing means from the broadcasting wave as a new set of presentation information (Col. 8 lines 1-33), and

wherein the outputting means outputs the new set of presentation information (Fig. 4, el. 18; Col. 6, lines 25-30; Col. 8, lines 1-33).

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Regarding claim 69, claim is analyzed with respect to claim 62. Freeman further teaches the set of presentation information has either a set of image data, a set of sound data, or a combination of the set or image data and the set of sound data, i.e. graphics data, video stream, and/or audio (Col. 13, lines 25-61).

Regarding claim 70, Freeman teaches the set of image data is a set of video data or a set of still image data i.e. graphics data, video stream (Col. 13, lines 25-61).

Regarding claim 71, claim is analyzed with respect to the combination of claims 50 and 62.

Regarding claim 72, claim is analyzed with respect to claim 62. Freeman further teaches a recording medium (Fig. 1, el. 34; Col. 5, lines 20-32).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Dougherty (US 5,848,352).

Regarding claim 52, Freeman teaches all elements of claim 50.

Freeman also teaches a valid period of each set of control information, i.e. trigger point occurs as the start of the control information and the end of the presentation is the end of the control information (Col. 13, lines 15-27).

Freeman does not clearly teach the content has a plurality of sets of control information, each set of control information included in the content being appended a version number in accordance with the valid period of each set of control information.

Dougherty teaches a content has a plurality of sets of control information, i.e. control information includes an application header record and one or more graphical descriptions (Col. 11, line 60-Col. 12, line 10) and is broadcast repeatedly (Col. 12, lines 22-27) thus giving the content a plurality of sets of control information containing a plurality of graphical control information, each set of control information included in the content being appended a version number in accordance with the valid period of each set of control information, i.e. valid period is defined by the Examiner to be represented by the process of sending and operating the graphical interactive information for a specific program segment until it is completed (Fig. 4, Col. 11, line 65-Col. 12, line 49; Col. 5, lines 63-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Freeman to have a plurality of sets of control information, each containing a version number, made by repeatedly



broadcasting the control information, as taught by Dougherty, for the benefit of being able to synchronize the version used by the broadcasting apparatus with the version used by the receiving apparatus so that less errors will come about.

12. Claims 54, and 63-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Wasilewski (US 5,600,378).

Regarding claim 54, Freeman teaches all elements of claim 50.

Freeman further teaches using MPEG-2 encoding the digital video signals and then multiplexing the signals onto a standard NTSC signal, (Col. 7, lines 21-42), a storage medium for storing the ACTV interactive codes, (Col. 6, lines 10-16), and multiplexing the control information which is included in the interactive program (Col. 7, lines 21-42).

Freeman does not clearly teach a bandwidth assigning table that shows a bandwidth for the digital data stream of the set of control information being part of a total bandwidth of the multiplexed stream, and start means for determining the multiplexing start positions of the set of control information in accordance with the bandwidths referred to in the bandwidth assigning table.

Wasilewski teaches a bandwidth assigning table, i.e. Network Information Table (Fig. 2, el. 36), that shows a bandwidth for the digital data stream being part of a total bandwidth of the multiplexed stream, (Col. 9, lines 30-38), and start means for determining the multiplexing start positions in accordance with the bandwidths referred to in the bandwidth assigning table (Col. 1, lines 59-61);

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Note: Wasilewski meets this limitation in the fact that the NIT contains the actual frequency that each program is carried on so it would follow that data would be multiplexed in accordance with its tuning frequency.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Freeman's broadcasting apparatus to have a bandwidth assigning table that shows a bandwidth for the digital data stream of the control information being part of a total bandwidth of the multiplexed stream, and start means for determining the multiplexing start positions of the control information in accordance with the bandwidths referred to in the bandwidth assigning table, as taught by Wasilewski, for the benefit of having fewer errors in the reception of the digital data signals.

Regarding claim 63, Freeman teaches all elements of claim 62.

Freeman further teaches the set of control information has a setting of a valid period which expresses a period during which the set of control information is valid within an output period of the set of presentation information corresponding to the set of control information, i.e. trigger point occurs as the start of the control information and the end of the presentation is the end of the control information (Col. 13, lines 15-27),

the set of presentation information being multiplexed into the multiplexed stream and the set of control information corresponding to the set of presentation

information being multiplexed into the multiplexed stream during the valid period of the set of control information (Col. 7, lines 20-30; Col. 11, lines 19-23).

Freeman does not clearly teach the set of presentation information being multiplexed into the multiplexed stream and the set of control information corresponding to the set of presentation information being repeatedly multiplexed into the multiplexed stream during the valid period of the set of control information.

Wasilewski teaches repeatedly broadcasting program information (Col. 1, lines 54-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Freeman's broadcasting apparatus to repeatedly multiplex the control information so that the information can be repeatedly broadcasted, as taught by Dougherty, for the benefit of not necessarily needing to locally store the program information (Wasilewski-Col. 1, lines 54-58).

Regarding claim 64, Freeman teaches all elements of claim 62.

Freeman further teaches first identification information is appended to the set of presentation information, and second identification information is appended to the set of control information, i.e. ACTV codes are contained in a data channel and an MPEG packet header identifies the various channels (Col. 11, lines 50-55; Col. 12, lines 10-15),

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wherein the extracting means includes:

first judging means for judging the first identification information appended to the set of presentation information in the broadcasting wave, i.e. MPEG packets are decoded (Col. 8, lines 12-41; Col. 11, lines 5-50);

second judging means for judging the second identification information appended to the set of control information in the broadcasting wave, i.e. MPEG packets are decoded (Col. 8, lines 12-41; Col. 11, lines 5-50);

obtaining means for obtaining a set of the presentation information, if the first judging means judges that the first identification information appended to the set coincides with specified identification information, and obtaining a set of the control information if the second judging means judges that the second identification information appended to the set coincides with specified identification information, i.e. MPEG header identifiers are decoded and the packets with the identifier from the user selection are obtained (Col. 8, lines 12-41; Col. 9, lines 40-54);

wherein the outputting means outputs the set of presentation information obtained by the obtaining means (Col. 9, line 58-Col. 10, line 5; Col. 11, lines 23-50), and

wherein the storing means stores the set of control information obtained by the obtaining means (Col. 5, lines 20-37; Col. 6, lines 35-44).

Freeman does not clearly teach the set of link information includes first identification information of the set of presentation information and second

identification information of the set of control information included in another linked content.

Wasilewski teaches a set of link information, i.e. DVB Program Specific Information (Col. 3, lines 21-45), which includes first identification information of a set of presentation information, i.e. Transport Stream IDs (Fig. 2, el. 32, 36), Packet IDs (Fig. 2, el. 36, 40), Program Numbers (Fig. 2, el. 32, 40), and second identification information of a set of control information, i.e. Transport Stream IDs (Fig. 2, el. 32, 36), Packet IDs (Fig. 2, el. 36, 40), LCNs (Fig. 2, el. 32), Program Numbers (Fig. 2, el. 32, 40), included in another linked content.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Freeman's ACTV command codes to include the DVB Program Specific Information as the set of link information, which links programs with a user selection, as taught by Wasilewski, for the benefit of having a well-known and often used set of linking information which is easy to encode and decode.

Regarding claim 65, Freeman in view of Wasilewski teaches a set of entry information, i.e. interrogatory messages/responses (Freeman-Col. 13, lines 15-61), giving the first identification information and the second identification information for the content to be reproduced first; Note: In order for graphical messages to be presented when the user begins watching a program, identifiers for the graphic and its corresponding control information will have to be given

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(Freeman-Col. 13, lines 15-61; Col. 12, lines 10-14); is multiplexed into the multiplexed stream, i.e. taken from storage and overlaid on video signal (Freeman-Col. 5, lines 20-45; Col. 13, lines 15-61),

wherein the signal receiving means receives a selection signal of the multiplexed stream (Freeman-Col. 13, lines 26-35),

wherein the extracting means further includes:

entry information extracting means for extracting the set of entry information from the multiplexed stream in accordance with the selection signal of the multiplexed stream from the signal receiving means, i.e. decoded (Col. 13, lines 26-45); and

entry information storing means for storing the set of entry information extracted by the entry information extracting means (Freeman-Col. 13, lines 26-44),

wherein the obtaining means obtains the set of presentation information and the set of control information to which the first and the second identification information indicated by the entry information stored in the entry information storing means is appended, i.e. audio/video responses are called from memory (Freeman-Col. 13, lines 15-61).

Regarding claim 66, Freeman teaches all elements of claim 62.

Freeman further teaches control means for controlling the extracting means, i.e. CPU (Fig. 8, el. 108);

wherein first identification information and second identification information are appended to the set of presentation information and the set of control information the first and second identification information being IDs (identifiers) of digital data streams to represent the set of presentation information and the set of control information in the multiplexed stream, i.e. packet header that identifies the various channels (Col. 12, lines 10-21); Note: ACTV codes are sent in a data channel and therefore are identified by the MPEG packet header (Col. 11, lines 50-60),

wherein the link information has an identifier of a set of presentation information and an identifier of a set of control information included in another linked content, i.e. a video stream is played in response to a user selection based on the function ID in the ACTV code (Col. 13, lines 15-61).

Freeman does not clearly teach the link information has an identifier of a set of presentation information and an identifier of a set of control information included in another linked content,

wherein a correspondence table is repeatedly multiplexed into the multiplexed stream, the correspondence table showing correspondence between the identifier for the set of presentation information and the first identification information, and correspondence between the identifier for the set of control information and the second identification information,

wherein the extracting means extracts the correspondence table,

wherein the control means, by referring to the correspondence table extracted by the extracting means, converts the identifier of the set of presentation information into the first identification information, and the identifier of the set of control information into the second identification information, and controls the extracting means so that, if the first identification information and the second identification coincide with specified identification information, then the extracting means extracts such a set of presentation information and such a set of the control information to which the specified identification information is appended.

Wasilewski teaches link information, i.e. DVB Program Specific Information (Col. 3, lines 21-46), that has an identifier of a set of presentation information and an identifier of a set of control information included in another linked content, i.e. Logical Channel Table contains multiple TSIDs, Program Numbers, etc. (Fig. 2, el. 32),

wherein a correspondence table, i.e. LCT (Fig. 2, el. 32), is repeatedly multiplexed into the multiplexed stream, (Col. 4, lines 54-61; Col. 1, lines 54-58), the correspondence table showing correspondence between the identifier for the set of presentation information and the first identification information, and correspondence between the identifier for the set of control information and the second identification information, i.e. TSIDs and Program Numbers (Col. 2, lines 38-43; Fig. 2, el. 32),



wherein the extracting means extracts the correspondence table, MPEG transport stream is decoded (Col. 4, lines 47-64),

wherein the control means, by referring to the correspondence table extracted by the extracting means, converts the identifier of the set of presentation information into the first identification information, and the identifier of the set of control information into the second identification information, i.e. the LCN from the EPG corresponds to the TSID and Program Number of the user selection (Fig. 2, el. 32; Col. 9, lines 20-53), and

controls the extracting means so that, if the first identification information and the second identification coincide with specified identification information, i.e. the LCN from the EPG corresponds to a TSID and a Program Number in the LCT (Col. 9, lines 15-30), then the extracting means extracts such a set of presentation information and such a set of the control information to which the specified identification information is appended, i.e. program is decoded (Col. 9, lines 30-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Freeman's set of link information to include an identifier of a set of presentation information and an identifier of a set of control information included in another linked content, wherein a correspondence table is repeatedly multiplexed into the multiplexed stream, the correspondence table showing correspondence between the identifier for the set of presentation information and the first identification information, and

correspondence between the identifier for the set of control information and the second identification information, wherein the extracting means extracts the correspondence table, wherein the control means, by referring to the correspondence table extracted by the extracting means, converts the identifier of the set of presentation information into the first identification information, and the identifier of the set of control information into the second identification information, and controls the extracting means so that, if the first identification information and the second identification coincide with specified identification information, then the extracting means extracts such a set of presentation information and such a set of the control information to which the specified identification information is appended, as taught by Wasilewski, for the benefit of having a well-known and often used set of linking information which is easy to encode and decode.

Regarding claim 67, Freeman in view of Wasilewski (Col. 1, lines 40-45) teaches the first identification information includes a packet identifier in accordance with MPEG2 (Moving Pictures Experts Group 2) standard.

Regarding claim 68, Freeman in view of Wasilewski teaches the first identification information is a combination of the packet identifier in accordance with MPEG2 (Moving Pictures Experts Group 2) standard (Wasilewski-Col. 1,

lines 40-45) and another parameter, i.e. ACTV codes (Freeman-Col. 13, lines 15-61).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY DUFFIELD whose telephone number is (571)270-1643. The examiner can normally be reached on Mon.-Thurs. 8:00 A.M.-5:30 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :25 July 2003; 13 February 2007; 28 November 2007.